Summary of 2017-2018 Events and Initiatives

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2017-2018 ANNUAL REPORT

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THE OFFICE OF
UNDERGRADUATE
RESEARCH &
CREATIVE INQUIRY
The 2017-2018 academic year was successful. The Office of Undergraduate Research & Creative Inquiry strives to reach and support thousands undergraduate researchers, and we look forward to providing new and exciting programs each academic year.

Here is a sample of our major initiatives:

- Nearly 800 students participated in the 24th Annual Denman Undergraduate Research Forum
- Nearly 300 students participated in the 2017 Fall Undergraduate Research Forum
- 53 students received summer research funding!
- 24 students participated in 3-Minute Thesis Competitions
- 19 students participated in the Research at Capitol Square Event
- 8 students traveled to Sao Paulo, Brazil to present their research

SUMMARY OF 2017-2018 EVENTS AND INITIATIVES
The start to a new academic year is always exciting. This is a crucial time for the Office of Undergraduate Research & Creative Inquiry to connect with incoming students, and also engage with students who are already participating in research.

**Five major campus-wide events were held during Autumn Semester 2018, including:**

- Fall Open House & Student Panel
- Fall Undergraduate Research Forum
- 3-Minute Thesis Competition
- SIMPÓSIO INTERNACIONAL DE INICIAÇÃO CIENTÍFICA E TECNOLÓGICA DA USP (SIICUSP) Conference in São Paulo, Brazil
- 2018 Summer Undergraduate Research Funding Bazaar
The Open House was an effort to engage with students at the beginning of the academic year. We were able to reconnect with current students, meet potential new students who were interested in research, and promote opportunities available to students.

The Open House was held on August 31, 2017 in the MLK Lounge of Hale Hall. Some of the main features of the event included information on OUR&CI resources, research trivia with prizes, campus partner presentations, and an undergraduate research panel.

Five undergraduate researchers shared their experiences and advice with fellow students. Panel participants included: Anjali Doshi (Biomedical Science), Karis Inboden (Human Development and Family Science), Roger Kassouf (Mechanical Engineering), Colin Quinn (Neuroscience), and Ellen Williams (Social Work).
On September 14, 2017, nearly 300 students participated in the Fall Undergraduate Research Forum. The event took place in the Buckeye Reading Room of Thompson Library. The Forum, hosted in conjunction with University Libraries, was a great opportunity for students to share their research with the University Community!
The 3-Minute Thesis (3MT) Competition tasks students to explain their research, in lay terms, in just three minutes.

The 3MT Competition was held on Wednesday November 1, 2017 in 020 Page Hall.

Awardees and Project Titles:

1st Place: Henry Wu - "Model Validation: Using Model Organisms as Theoretical Models"
2nd Place: Alison Baker - "AAccelerated Language Development"
3rd Place: Matt Schneider - "Lion Names, Human Claims: Geographies of Life & Death in the African 'Wild'"
Honorable Mention: Chris Newman - "African Spirituality and the Slave Experience in Pre-Antebellum America"
Honorable Mention: Amber Moore - "Death By Stigma: A Tanzanian Tragedy"

Fun Fact!
The 3-Minute Thesis Competition originated at the University of Queensland in Australia!

The 3-Minute "mark" resulted from a drought, where citizens were asked to limit their showers, many using 3-minute egg timers!

https://threeminutethesis.uq.edu.au/

Middle Row, L-R: Madison Smith, Amber Dock, and Amber Moore.
Front Row, L-R: Julianne Stamer, Skyler Ware, Nisha Maheshwari, and Bethany Toma.
During October 14th-20th, eight undergraduates traveled to São Paulo, Brazil to present their research at the 25th Annual SIICUSP Conference. While in Brazil, students had the opportunity to learn about Brazilian culture and explore both São Paulo and Piracicaba.

Students who attended the conference were: **Katelyn Richardson** (Engineering), **Gabriella Grose** (Speech and Hearing Sciences), **Ellen Williams** (Social Work), **Ivan Susan Pires** (Engineering), **Casey Turner** (Neuroscience), **James Li** (Biomedical Science), **Mason Fisher** (Biomedical Science), and **Johnathon King** (Environmental Science).
The 2018 Summer Undergraduate Research Funding Bazaar was held on November 15, 2017 in the Biomedical Research Tower. The Funding Bazaar gave Departments, Colleges, and Programs the chance to interact with students interested in applying for various research funding opportunities.
Three major campus-wide events were held during Spring Semester 2018, including:

Undergraduate Research Day at Capitol Square

3-Minute Thesis Competition

23rd Annual Richard J. and Martha D. Denman Undergraduate Research Forum
On February 28, 2018 undergraduate researchers from the Columbus, Newark, and Lima campuses met with their hometown representatives to discuss their research projects while serving as Ohio State ambassadors.

Student Participants: Charles Cayton (Newark Campus), Michael Erickson (College of Arts and Sciences), Taylor Gifford (College of Arts and Sciences), Lauren Hamer (College of Arts and Sciences), Marty Koelsch (College of Arts and Sciences), Allie Lenyo (College of Medicine), Elizabeth McNamara (College of Nursing), Andrea Morales (Lima Campus), Riley Mullins (College of Pharmacy), Eleni Packis (John Glenn College of Public Affairs), Allison Porter (College of Medicine), Ivanni Soto (College of Dentistry), Roshini Srinivasan (College of Education and Human Ecology), Mariah Stollar (College of Food, Agriculture, and Environment Sciences), Casey Turner (College of Arts and Sciences), Tyler Webb (College of Arts and Sciences), Ellen Williams (College of Social Work), and Ryan Yoder (College of Public Health).
Twelve students participated in the Spring (3MT) on February 28, 2018. We welcomed a group of Columbus State Community College students to watch the event, and provided them the opportunity to ask student presenters questions about Ohio State and research opportunities.

Awardees and Project Titles:

1st Place: Anthony Milian - "Developing a Kinesthetic Teaching Methodology and Choreographing Experience"

2nd Place: Maya Gosztyla - "Fruit Flies and Neuron Navigation: Identifying Natural Variation in Midline Axon Guidance Using the Drosophila melanogaster Genetic Reference Panel"

3rd Place: Eleni Packis - "The Impact of Publishing Ohio Teachers' Value-Added Scores"

Honorable Mention: Sunny Kwok - "A Computational Model of the Interactions between VEGF Receptor-2, Neuropilin-1, and VEGF-A"

Honorable Mention: Samantha Goode - "Exercise Self-Efficacy, Anxiety Sensitivity, and Reported Exercise in Obese Adults"
The 23rd Annual Denman Undergraduate Research Forum, held on April 3, 2018 in the Ohio Union, was our largest event of the academic year! Nearly 800 students presented their research in both poster and oral presentation formats.

We were pleased to welcome a group of Columbus State Community College students to the event.

Four Students from the University of São Paulo, accompanied by Dr. Debora Chadi, presented at the Forum, including: Breno de Almeida Avancini (Engineering: Chemical & Environment), Juliane Cristina Fernandes (Cell Biology and Physiology), Marcela Maria Mello (Cell Biology and Physiology), and Natalia Abreu de Oliveira (Drugs and Surgical Interventions to Improve Clinical Outcomes).

Other special parts of the Forum included historical displays documenting how the Forum has evolved over the past 23 years, as well as booths for campus partners such as Pelotonia, The Writing Center, and The President’s Prize!

Four Distinguished Undergraduate Research Mentor awardees were acknowledged: Tasleem Padamsee (Public Health), Nicole Patson (Psychology, Marion Campus), Christopher Coss (Pharmacy), and Peter Mansoor (History).

2018 Distinguished Undergraduate Research Mentors

Pictured Left to Right: Christopher Coss (College of Pharmacy), Peter Mansoor (College of Arts and Sciences), Nikole Patson (College of Arts and Sciences), and Tasleem Padamsee (College of Public Health).
Below are pictures highlighting the 23rd Annual Denman Undergraduate Research Forum and Awards Reception. Mr. and Mrs. Denman, pictured with President Drake in the center photo, are founders of the annual event.
The Denman Undergraduate Research Forum Awards reception was hosted on April 6, 2018. 2018 Denman Undergraduate Research Forum awardees were:

**Analytical and Physical Chemistry**
1st: Alexander Grooms

**Animal Sciences**
1st: Michael Loveless
2nd: Dillon McBride

**Basic Neuroscience**
1st: Carolina Ortiz
2nd: Julia Kumar
3rd: Casey Turner & Julia Dziabis

**Beyond Earth**
1st: Sameed Pervaiz

**Biomechanics and Rehabilitation**
1st: Michael Collins
2nd: Sogand Abbasi
3rd: Mary McGrath & Carl Higbea

**Business Solutions in a Global Economy**
1st: Landon Palma
2nd: Anthony Rangel
3rd: Evan Lingrel

**Cell Biology & Physiology**
1st: Emily Teets & Sunny Kwok
2nd: Tony Satroplus
3rd: Pierce Ciccone & Johan Harris

**Clinical Education & Assessment**
1st: Olivia Qi Hui Wong
2nd: Lindsey Welch

**Cognitive and Brain Sciences**
1st: Amber Moore & Catherine Panchyshyn
2nd: Katelyn Smithberger

**Culture and Storytelling**
1st: Jamie Wise
2nd: Ellen Williams
3rd: Gretchen Klingler

**Drugs and Surgical Interventions to Improve Clinical Outcomes**
1st: Eaman Abay
2nd: John Mickley

**Education and Schools**
1st: Sarah Sounders
2nd: Andrea Morales & Sarah Leonard

**Engineering: Chemical & Environment**
1st: Ivan Pires
2nd: Lucas Watson
3rd: Emma Garber

**Engineering: Health & Medicine**
1st: Mukul Govande
2nd: Rachel Teater
3rd: Sophie Carus & Jacob Enders
23RD ANNUAL DENMAN UNDERGRADUATE RESEARCH FORUM AWARDS RECEPTION

Engineering: Materials
1st: Michael Lee
2nd: Taylor Dittrich

Engineering: Mechanical & Aerospace
1st: Ian Chamberlain
2nd: Junfeng Li
3rd: Peter Vuyk

Environmental and Conservation Monitoring
1st: Amy Luo
2nd: Victoria Colin
3rd: Aaron D’Amore

Environmental Responses of Plants and Crops
1st: Prativa Amom

Food Science, Safety, & Security
1st: Stacy Lu
2nd: Haley Orwig

History of People and Art
1st: Harrison Fillmore
2nd: Devon Reich
3rd: Julianne Stamer

Language in the Mind
1st: Karl Velik
2nd: Ted Oyler

Math, Computation, and Analytics
1st: Jackson Killian
2nd: Meghan Booker

Microbiology & Microbial Infections
1st: John Wildenthal
2nd: Dale Lingo

Molecular Biophysics & Chemical Biology
1st: Seth Lyon
2nd: Farida Eid
3rd: John Bouranis & Madison Smith

Molecular Genetics & Genomics
1st: Alicia Bao
2nd: Amelia Staats
3rd: Leah Anderson

Promoting Wellness and Social Justice within Communities
1st: Caroline Buck
2nd: Morgan Ciehanski & Brooke Epstein & Danielle Kfoury

Science for the Public Good
1st: Mikafui Dzotsi
2nd: Christian Moore & Nick Armstrong & Jenny Hoppert & Amanda Knight & Kevin Maas
Social Psychology
1st: Rachel Dawson & Kathleen Hudson
3rd: Charles Cayton
Solving Complex Population Health Issues
1st: Leah Sadinski
2nd: Kassidy Ams
Synthetic Chemistry, Catalysts, & Materials
1st: Dennis Yang
2nd: Milauni Mehta
3rd: Sydney Sillart
Toward Precision Cancer Medicine
1st: David Lopez
2nd: Parviz Kanga & Zachary Kauffman & Maria Riley & Blaire Schumacher
3rd: Jesse Fine
Understanding Cancer Risk and Survivorship
1st: Marcia Burns
2nd: Katherine Conroy

Water and Earth
1st: Sarah Soloman
2nd: Alexandra Smith
3rd: Nicole Episcopo & Allyson Brady

Special Awards:
Pelotonia
1st: Zachary Brannan
2nd: Neil Makhijani & Abigail Robbertz

Office of Energy & Environment
1st: Ashlee Balcerzak
1st: Rachel Beery
1st: Audrey Bezilla
1st: Emma Garber
The Images of Research + Arts Competition was a new initiative offered in 2018. Twelve students, from across campus, submitted photographs and accompanying descriptions of their research. A panel of faculty judges reviewed submissions and identified four finalists. Finalist submissions were printed and displayed at the 23rd Annual Denman Undergraduate Research Forum. Denman Forum participants reviewed and selected their favorite photograph through a formal voting process.

Victoria Piper won first place for her piece, "Banished from Eden" (top left); Rachel McLaughlin won second place for her work, "Pollinators" (top right); Taylor Dittrich for her piece, "Clashing Waves" (bottom left); and Honorable Mention for Maya Gosztyla and her piece, "Buzzing With Life" (bottom right).
One of OUR&CI’s major initiatives, outside of hosting events, is to provide research funding to students in all disciplines. In 2018, OUR&CI was able to provide funding to 53 of the 173 students who applied for summer funding. Research funding awards averaged $4000.00 each.

OUR&CI offers the following awards:

**Undergraduate Research Apprentice Program (URAP):** This award provides funding support to students initiating their first research experience under faculty mentorship.

**Advanced Undergraduate Researcher Award (AURA):** This award provides funding support to students working on an established research project under faculty mentorship.

**Karen A. Holbrook Fund Award:** This award provides funding to support students carrying out a research project in an international setting under faculty mentorship.

These photos were submitted to us by our summer researchers.
SUMMARY OF 2017-2018 EVENTS AND INITIATIVES

URAP Awardees
Lovette Azap
Luke Bobay
Zachary Braun
Iona Campbell
Marissa Farinas
Michael Ferrarelli
Anna Garrett
Megan Gertzen
Asish Katta
Navroop Kaur
Jeongin Kim
Parker Kronen
Riley Limach
Stacy Lu
Duncan MacKenzie
John Meacham
Maura Mittermeier
Catherine Panchyshyn
Laura Pham
Phinu Philip
Madison Pico
Nikhil Pramod
Adithe Rivaldi
Lauren Tucker
Jahara Wakeel
Haoran Wang
Rebecca Weiss
John Yu
Tiffany Yu

AURA Awardees
Alicia Bao
Ashlee Chadwick
Karthik Chakravarthy
Kyle Deistler
Ellen DeWitt
Harrison Fried
Amanda Gibson
Jacob Grimmer
Browning Haynes
Avery Meyer
Riley Mullins
Nicholas Nastasi
Ivan Pires
Abu Rogers
Patrick Smith
Zachary Smotzer
Miranda Westrick
Brendan Whitaker

Karen A. Holbrook Awardee
Charis Ramsing
Throughout Spring 2018, we initiated a research blog to highlight student researcher experiences. Mikafui Dzotsi was instrumental in organizing and leading this effort for our Office. The blog can be accessed here: https://ugresearchtheohiostateuniversity.wordpress.com/

To date, blogs included:

January, 2018: Climate Change
February, 2018: Cardiovascular Health
March, 2018: Celebrating Women: HERStorically
Each month, OUR&CI distributes a newsletter highlighting research accomplishments of students and alumni.

**Student Spotlights:**
- Ali Baker
- John Hooton
- Zac Botkins
- Emily Boes
- Erin Riddiford
- Ivan Pires
- Ellen Williams
- Casey Turner
- Jess Witikin
- Tyler Webb
- Ivanna Soto
- Mariah Stollar
- Jennifer Hoppert

**Alumni Spotlights:**
- Joshua Ong
- Geoff Green
- Abd Al Rahmna Traboulsi
- Katie Ferman
- Peter Michaildis

**OUR&CI Office Assistants:**
Four undergraduate research assistants worked with our team throughout the 2017-2018 academic year.

**Top Left:** Ryan Yoder  
**Top Right:** Brook (Blake) Ray  
**Bottom Left:** Allison Fenter  
**Bottom Right:** Mikafui Dzotsi